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File 347:JAPIO Nov 1976-2004/Jan(Updated 040506)
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Set	Items	Description
S1	14928	((TERMINAL OR DEVICE OR HANDHELD) (5N) (USER OR CUSTOMER OR

BUYER OR CONSUMER OR PURCHASER)) (S) (BILL OR ORDER)
S2 231737 (PERSONAL OR USER OR CUSTOMER OR CONSUMER OR INDIVIDUAL OR
PURCHASER) (5N) (TERMINAL OR PHONE OR (DIGITAL (1W) ASSISTANT-
))
S3 4534 (PAY OR PAID OR PAYMENT) (10N) S2
S4 1345 S2 AND (RECEIV? OR TRANSMIT? OR SEND?) (5N) (BILL? OR TRANS-
ACTION) (S) S2
S5 10409 ((TRANSMIT? OR SEND? OR COMMUNICAT?) (5N) (BILL? OR TRANSA-
CTION)) (10N) (INSTITUTE OR PROVIDER OR CREDIT OR BANK)
S6 212 S5 AND S4
S7 194 ~~RD S6 (unique items)~~
S8 35 S7 AND PY<1997
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*reviewed all references for key elements of
the application claims. 6-4-04*

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8/7/1 (Item 1 from file: 15)
DIALOG(R) File 15:ABI/Inform(R)
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01114996 97-64390

USE FORMAT 9 FOR FULL TEXT

Electronic payment systems: What all marketers need to know

ABSTRACT: Collecting payment from customers is the single most important part of any marketing program. There are 2 methods of accepting customers' checks electronically: 1. pre-authorized draft, which is a paper transaction, and 2. an electronic funds transfer, which is a paperless transaction. Both tools are effective for accepting payment. Many consumers are more willing to give out their checking information over the telephone than their credit card number. Also, from the **consumer** side, accepting checks over the **phone** is a major convenience.

Weiss, David

Telemarketing v14n3 PP: 106-109 Sep 1995 ISSN: 0730-6156 JRNL CODE:
TLM

DOC TYPE: Journal article LANGUAGE: English LENGTH: 3 Pages
WORD COUNT: 2008

8/7/2 (Item 1 from file: 9)
DIALOG(R) File 9:Business & Industry(R)
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1433073 Supplier Number: 01433073 (THIS IS THE FULLTEXT)
Electronic payment firm banks on unbanked clients
(Some 31% of US population doesn't have checking accounts; IPP offers
system that allows people to pay bills at nonbank venues)
Crain's New York Business, v XII, n 11, p 12
March 11, 1996
WORD COUNT: 693

TEXT:

NJ company signs up merchants in city to system for people without checking

BY FREDERICK GABRIEL

A small New Jersey company has targeted New York City as the next frontier in its bid to offer electronic payment services nationwide.

The company, In-Person Payments Inc., claims that it is signing up to six local merchants a day for a system that lets people without checking accounts pay bills at supermarkets, pharmacies and check-cashing stores.

"New York City has a very large population of 'unbanked' (consumers)," says IPP President Marvin Morris, who grew up in the East New York section of Brooklyn. "We think there's a lot of business for us there."

The "unbanked" refers to the estimated 31% of the U.S. population that does not have checking accounts. Typically, these people live in low- to moderate-income neighborhoods or are recent immigrants.

IPP's system is simple. A customer presents a bill and a cash payment to the retail agent who in turn enters the transaction into IPP's computer terminal and gives the customer a receipt. The agent's computer automatically dials into IPP's system and transfers the payment information. IPP then transmits the data to the biller for credit to the customer's account.

The agent is also expected to deposit the cash into a local bank within 24 hours. IPP automatically retrieves the payment from that account and forwards it. If for any reason IPP is unable to collect the money out of the retailer's account, the merchant's system is shut down, says Mr. Morris.

Customers are charged \$1 for each payment made, a portion of which the retailer keeps. That's the same price or cheaper than a money order, the major alternative for these consumers.

Under one network

While the utilities have been installing proprietary bill payment systems at supermarkets, drugstores and other retail outlets for several years, IPP's system consolidates all of the utilities' systems under one network. And it greatly expands the number of bills that may be paid at a retail outlet.

IPP operates in New Jersey, eastern Pennsylvania and Maryland, and has a total of 180 retail merchants using its system, including department stores, cable companies and utilities.

While 3-year-old IPP only received a New York state Banking Department license that allows it to transmit money in the state in January, the Wayne, N.J.-based business has already signed up such companies as Consolidated Edison Co. of New York and Nynex Corp.

IPP is currently processing 100,000 payments a month, about 30,000 of which are from New York City customers, says Mr. Morris. For about 25% of the transactions, the company utilizes New York money-center giant Citibank's automatic bill-paying network. For the rest, IPP deals directly with the billers themselves.

So far, IPP has signed up 60 merchants in New York City and is negotiating contracts with about 40 others. The company expects to add another 400 to 500 retailers over the next 12 months, says Mr. Morris.

"That should be enough for the five boroughs," he says. "We don't want to put one on every street corner, because the service is also intended to draw customers into the stores of these merchants."

But IPP's system seems unlikely to foment an electronic-bill-paying revolution in New York City, at least at any time soon.

Learning curve required

"There's a learning curve associated with this," says Ira Kell, chief financial officer of Bronx-based David's Money Centers, which offers the IPP system at its check-cashing centers in New Jersey and plans to unroll

it at its 20 New York City centers this month. "It's not a loss leader, but it's going to take time to get people to break the habit of paying by money order."

In the meantime, IPP is also hatching plans to work with banks, including Citibank, that are involved in the electronic delivery of welfare and other public benefits. Mr. Morris says that the company's software and hardware already have the capability to handle electronic benefit transfers.

"It's something that is in the planning stages right now," he says. "But this would be a perfect vehicle for welfare recipients to collect their payments and pay their bills at the same time."

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8/7/3 (Item 1 from file: 275)
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01353709 SUPPLIER NUMBER: 08411052 (THIS IS THE FULL TEXT)
Verifone UK wins #1m deal to cut W H Smith customer waiting time.
(installing 1,900 EFTS terminals at retail stores)
Computergram International, nl418, CGI05030010
May 3, 1990

TEXT:

VERIFONE UK WINS #1M DEAL TO CUT W H SMITH
CUSTOMER WAITING TIME

Transaction **terminal** supplier Verifone UK Ltd is to install 1,900 of its electronic funds transfer point of sale units over 280 branches of W H Smith Retail (CI No 1,414). This is part of a deal worth #1m which Verifone has completed with the high street stationery, book, audio and video store. W H Smith retail sales administration manager Tom Gelleburn claims that the new, local area network-based system will save customers a nationwide total of 59 years waiting time in every trading year. This figure is based on the current two minute average transaction time for each of the 10m credit card transactions that is handled by Smiths every year. The local area network operating system was developed by Verifone UK's parent company, Redwood City, California-based Verifone Inc, and uses telephone wire to transmit data at 19.2Kbps. By autumn of this year, W H Smith will have installed up to 25 of the Tranz 340 terminals - consisting of a small keypad, card slot, Verifone-developed software and a Z80 chip - in each of its 280 branches, with credit and debit card transactions being processed at each counter. These transactions are then sent on to the Verifone Tranzit 1200c local net communications controller for validation, and finally relayed overnight via the X25 protocol to a central IBM 3090 mainframe. The mainframe **sends** all **transaction** details to Lloyds **Bank** Plc, which then distributes the data to the relevant bank or building society holding the customer's account. Verifone UK was set up in early 1988 and during this time has seen turnover grow to around #3m - managing director Ken Hansen expects this to expand considerably in the next year, despite competition from other forms of transaction processing, such as the Cable & Wireless Plc-Racal Telecommunications Plc Paknet radio-based system, which is presently installed in the Swindon Do It Yourself branch of W H Smith. Hansen reckons that if Paknet gets the pricing right for its system it could really take

off, but is confident that this will have the effect of expanding the total automatic transaction processing market. Indeed, in the near future custom for the electronic funds transfer point of sale technology-driven market looks secure.

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8/7/4 (Item 1 from file: 476)
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0005053745 B09IIAKAFFFT
Lloyds Bank places order for 2,000 eftpos terminals
ALAN CANE
Financial Times, P 5
Saturday, September 9, 1989

TEXT:

LLOYDS Bank is buying 2,000 terminals developed for 'cashless shopping' - electronic funds transfer at the point of sale - which it intends to market to retailers.

The order is worth Pounds 1.8m, at Pounds 900 a terminal. Lloyds would not say what it intends to charge retailers for the terminal but confirmed that it intends to make a profit from the deal.

The terminal will sit alongside an electronic cash register or electronic point of sale system, validating plastic cards and recording and processing transactions.

The order has been placed with the UK subsidiary of Nokia Data of Finland, a leading manufacturer of data communications and processing systems. It already supplies most UK clearing banks and EFT/POS UK, the cashless shopping organisation.

The deal between Lloyds and Nokia has broken new ground in two directions. These are that the terminal was developed through co-operation between Lloyds and Nokia as the first phase of a more general collaboration which is expected to yield a range of new EFT/POS products.

The terminal has also been designed to allow the retailer considerable flexibility.

Cashless shopping involves the use of a plastic card as a substitute for cash or cheques using a terminal which reads information on the card.

Details of the **transaction** are **transmitted** from the **terminal** to the **customer's bank** over the telephone.

The Nokia terminal is able to handle all major card schemes, determining which network it has to gain access to and which security system it must use. It can be reprogrammed electronically over the telephone.

EFT/POS UK, owned by the clearers, has been developing standards and procedures for a national cashless shopping system for three years. The first terminals are now going live in trials in Southampton, Leeds and Edinburgh.

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8/7/5 (Item 1 from file: 621)
DIALOG(R) File 621:Gale Group New Prod.Annou.(R)
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01408145 Supplier Number: 46567795 (THIS IS THE FULLTEXT)
Colonial Data and US Order's revolutionary Smart Phone receives prestigious industry award; Volume production begins immediately.
Business Wire, p07241137
July 24, 1996

TEXT:

NEW MILFORD, CT.--(BUSINESS WIRE)--July 24, 1996--Colonial Data Technologies Corp. ("CDT") (Nasdaq:CDTX) and US Order (Nasdaq:USOR) announced today that their revolutionary Smart Phone, sold under the Intelifone and Telesmart brands, won the prestigious Smart Telephone Design Award Monday night from the Interactive Services Association (ISA) in San Diego at its annual convention. The smart telephone was one of 18 award winners from a field of over 300 entrants. The judges applauded the integration of a full QWERTY keyboard, graphics display screen and magnetic stripe card reader at an affordable price point. The two companies authorized factory production to begin immediately.

By combining direct sales via major telephone companies, major retail programs, and direct to consumer sales through CDT's Worldwide Telecom joint venture, we will be reaching a potentially enormous consumer base just as telephone companies are making more advanced intelligent network services available," said Bob Schock, President and Chief Executive Officer of CDT. "The Telesmart will be aggressively priced to our telco customers," Schock added.

"Our smart telephone officially launches the much-talked-about new information appliance industry," combining many of the features of a computer and the services of the Internet in a low cost, smart telephone. We expect to have the Intelifone, retailing at \$299, available on over 2,500 retail shelves beginning around Labor Day," said US Order President John Backus. Backus also noted, "The 1996 ISA award is the latest recognition of our continuing leadership in the Smart Phone industry." The company won Consumer Electronic Show awards in 1994 and 1996, and its PhonePlus banking application won an ISA award in 1995.

Herndon, VA.-based US Order, the designer of the Smart Phone in 1995 formed a strategic alliance with CDT to manufacture and market the phone. The Smart Phone is marketed by CDT to an impressive list of telephone companies under the Telesmart 4000 name, and is marketed by US Order to retailers and other outlets as the Intelifone 2000.

The Smart Phone is designed with a combination of state-of-the-art features currently unavailable to consumers. Among the phone's more advanced functions is its ability to allow users to simultaneously take advantage of call waiting, Caller ID and voice mail services available from telcos. Beginning this fall users will also be able to send e-mail over the Internet, pay bills and bank electronically, type and send text messages directly to alphanumeric pagers, and use integrated pocket organizer features. One of the Smart Phone's more popular functions is electronic national directory assistance, which visually displays telephone numbers and addresses on the phone's screen for autodialing as well as downloads them into the phone's 500-name and address, 1,500 number personal directory.

Among the Smart **Phone**'s other advanced functions are digital signal processing capability, a backlit graphics screen, capable of displaying high resolution icons and logos, high-quality two-way speaker phone capability, a typewriter style keyboard, and a magnetic card reader.

US Order also announced the introduction of its SmartTime Network Service Bundle, to be available this fall on its Smart Phone. For a \$7.95 per month flat price consumers will have access to unlimited Internet e-mail, alphanumeric paging, electronic directory assistance, data backup, stock quotes, sports scores, weather, lottery and horoscope. Consumers will be able to use these services for 30 days at no charge.

Colonial Data Technologies Corp. designs, develops and markets telecommunications products that support intelligent network services being introduced by the leading domestic and international telephone operating companies. The Company has concentrated its development and marketing efforts on products and services that support Caller ID and other intelligent network services. The Company also repairs and refurbishes telecommunications equipment for its customers. US Order develops and markets products and services for the financial services and telecommunications industries. The Company's financial service products include bank-branded customer service, voice response systems and data translation systems. Its telecommunications products include the Intelifone 2000/Telesmart 4000 Smart Phone plus a complete package of interactive applications. Over 50 banks and telephone companies currently use the Company's products and services.

"Safe Harbor" statement under the Private Securities Litigation Reform Act of 1995:

This release contains forward looking statements that are subject to risks and uncertainties, including, but not limited to, the impact of competitive products, product demand and market acceptance risks, reliance on key strategic alliances, fluctuations in operating results, delays in development of highly-complex products and other risks detailed from time to time in US Order and CDT's filings with the Securities & Exchange Commission. these risks could cause the company's actual results for 1996 and beyond to differ materially from those expressed in any forward looking statements made by, or on behalf of, CDT and US Order.

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or

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Lee Foley
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8/7/6 (Item 2 from file: 621)
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01333072 Supplier Number: 46045871 (THIS IS THE FULLTEXT)
COLONIAL DATA RECEIVES INNOVATIONS 96 AWARD FOR TELESMAST 4000 ADSI SMART

TELEPHONE.

Business Wire, p01051092

Jan 5, 1996

TEXT:

NEW MILFORD, Conn.--(BUSINESS WIRE)--January 5, 1996 -- Colonial Data Technologies Corp. (AMEX:CDT) today announced it has won the Innovations 96 award for the revolutionary ADSI smart phone, Telesmart 4000 (TS 4000), that for the first time, gives consumers access to major new advances in interactive applications via telephone.

The award, which recognizes product excellence, is presented annually at the most prestigious electronics show, the International Winter Consumer Electronics Show, by the Design and Engineering Honors Program sponsored by the Electronics Industries Association. The Innovations 96 award, the highest award received at the CES, is based on product innovation, value to the user, aesthetics, and contribution to quality of life. The Innovations 96 honorees will be specifically displayed at the International Winter Consumer Electronics Show and at Colonial Data's booth (17772) at the Sands Hotel, Las Vegas, Nevada.

The Telesmart 4000, which will be jointly marketed by Colonial Data and US Order, enables users to send E-mail over the Internet, pay **bills** and **bank** electronically, type and **send** text messages directly to pagers, shop from catalogs electronically, use integrated organizer features and receive advanced new forms of Caller ID from their telephone companies. Caller ID functions will include Simultaneous Caller ID/Call Waiting (SCWID) and a visual message waiting indicator. A particularly popular information application is electronic directory assistance, which searches national databases and visually displays telephone numbers and addresses on the phone's screen for autodialing or downloading into the **phone's** 150-name **personal** directory.

The Telesmart 4000 includes many features to facilitate ease of use and functionality. The smart telephone includes digital signal processing capability, a backlit graphics screen, a high-quality two-way speaker, a typewriter-style keyboard, and a magnetic card reader for electronic banking and home shopping.

Walter M. Fiederowicz, Chairman of Colonial Data, stated, "We believe this prestigious award is just another indication of the success in product design and development and the enormous market potential for the Telesmart 4000 ADSI telephone. The ADSI software provides enormous call management flexibility allowing users the ability to receive Caller ID and integrate it with Call Waiting. This allows users to identify who is holding on Call Waiting from the name and phone number that appears on the graphics screen. They can choose to take the call, place it on hold, ask the caller to wait, deliver specific answering messages, and automatically redial the second caller later. Most telephone companies will be offering versions of this service in 1996."

With the advent of home banking and home shopping, in combination with advanced Caller ID functionality, the product marks a breakthrough with the potential to penetrate millions of homes and businesses over the next several years and help create a mass market for smart phones and the applications that operate on them. The Telesmart 4000 will hit the market in 1996 just as major telephone companies begin to roll out their ADSI-based services, and banks begin large roll-outs of electronic banking."

"It is also important to note," said Fiederowicz, "that the Telesmart 4000 is the first richly functional smart phone that conforms fully to ADSI, the analog display services interface standard developed for advanced

network services by Bellcore, the research and certification laboratory jointly owned by the regional Bell operating companies. In addition to supporting the ADSI standard, it also conforms to the TAP specifications used by the paging industry, which means the Telesmart 4000 paging message function works with all the major paging services.

Colonial Data Technologies Corp. designs, develops and markets telecommunications products that support intelligent network services being developed and implemented by leading domestic and international telephone operating companies. The Company has concentrated its product development and marketing efforts on products that support Caller ID, an intelligent network service that allows subscribers to view the telephone number and the directory name of the calling party before the call is answered, and to store that information in memory. The Company also repairs and refurbishes telecommunications products for commercial customers and provides services that support the development and implementation of intelligent network services.

CONTACT: COLONIAL DATA TECHNOLOGIES CORP.

Walter M. Fiederowicz, 203/355-3178

or

Morgen-Walke Associates, Inc.

IR Contact: Donna Stein/Evan Smith/Courtney Levi

Press: Lee Foley, 212/850-5600

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8/7/7 (Item 3 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

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01330491 Supplier Number: 46019770 (THIS IS THE FULLTEXT)

US ORDER AND COLONIAL DATA INTRODUCE FIRST POPULARLY-PRICED ADSI SMART
PHONE WITH ADVANCED FUNCTIONS

PR Newswire, p1220NYW035

Dec 20, 1995

TEXT:

Telesmart 4000 Is 'Break Through'
That Will Create Home and Business Mass Market

First Demonstration of Telesmart 4000 is at CES Winter Show
in Las Vegas (Booth 17772)

HERNDON, Va. and NEW MILFORD, Conn., Dec. 20 /PRNewswire/ -- US Order Inc. (Nasdaq: USOR) and Colonial Data Technologies Corp. (AMEX: CDT) today introduced a revolutionary ADSI smart phone that for the first time gives consumers popularly-priced access to major new advances in interactive applications via a telephone.

The Telesmart 4000 will be priced under \$200 wholesale, which is almost 50% less than other smart phones with similar advanced functions. The companies said they believe that the Telesmart 4000 is a breakthrough product that has the potential to penetrate millions of homes and businesses over the next several years and help create a mass market for smart phones and the applications that operate on them.

Telesmart 4000 users, the companies noted, can send E-mail over the Internet, pay **bills** and **bank** electronically, type and **send** text messages directly to pagers, shop from catalogs electronically, use integrated organizer features and receive advanced new

forms of Caller ID from their telephone companies. A particularly popular information application is electronic directory assistance, which searches national databases and visually displays telephone numbers and addresses on the phone's screen for autodialing or downloading into the **phone's** 150-name **personal** directory.

The sleek Telesmart 4000, the companies said, brings a combination of firsts to a popularly priced smart telephone, including digital signal processing capability, a backlit graphics screen, a high-quality two-way speaker, a typewriter-style keyboard, and a magnetic card reader for electronic banking and home shopping.

US Order and Colonial Data, which formed a strategic relationship to design, manufacture and market a line of ADSI-compatible smart telephones like the Telesmart 4000, said they will demonstrate the new smart phone and its applications for the first time at Colonial Data's booth at the Winter CES in Las Vegas at the Sands Expo (booth 17772). They said that manufacturing has begun based on advance orders from several telephone companies and banks, and that they will begin shipping the phones in March.

"The Telesmart 4000 is the phone of the future," said Walter M. Fiederowicz, chairman of Colonial Data. "We are hitting the market in 1996 just as the major telephone companies begin to roll out their ADSI-based services, and banks begin large roll outs of electronic banking."

"The ADSI software provides enormous call management flexibility," added Fiederowicz. "The Telesmart 4000 can receive Caller ID and integrate it with Call Waiting. This allows users to identify who is holding on Call Waiting from the name and phone number that appears on the graphics screen. They can choose to take the call, place it on hold, ask the caller to wait, deliver specific answering messages and automatically redial the second caller later. Most telephone companies will be offering versions of this service in 1996."

"The advanced telephone and electronic banking services are important new sources of revenues for telephone companies and financial institutions," pointed out John C. Backus, president and chief operating officer of US Order. "Both will require the Telesmart 4000 for maximum sales penetration because it is based on industry wide standards and is technically advanced yet reasonably priced for a mass market."

Backus of US Order explained, "We have great expectations for the Telesmart 4000 because at a price below \$200 it delivers many of the capabilities of expensive computers in a simple and less threatening way. Because consumers at all technology levels are comfortable with telephones, we believe that both "low tech" and computer-savvy users alike will find smart telephone-based services more accessible and easier to use than through their PCs."

"This is a breakthrough product," explained Fiederowicz. "A modem facilitates downloading of new software to the Telesmart 4000 once additional services are introduced by the company and ordered by the consumer. The modem also allows for remote technical assistance and servicing."

"It also is important to note," said Fiederowicz "that the Telesmart 4000 is the first richly functional smart phone that conforms fully to ADSI, the analog display services interface standard developed for advanced network services by Bellcore, the research and certification laboratory jointly owed by the regional Bell operating companies."

The companies said that in addition to supporting the ADSI standard, it also conforms to the TAP specifications used by the paging industry, which means the Telesmart 4000 paging message function works with all the major paging services.

The two companies also said the Telesmart 4000 is currently undergoing

compliance certification by Bellcore, with complete results expected in January. The process is considered a prerequisite by most major telephone companies for choosing suppliers of smart telephones.

Colonial Data, which manufactures and distributes the phones to telecommunications companies, also said that it has begun production to meet initial launch orders from several major phone companies. "We are extremely pleased with the launch orders and the strong support from our telco customers for our first ADSI smart phone," said Fiederowicz. "We share US Order's expectations for the Telesmart 4000. Our collaboration with US Order has significantly shortened our time to market for this product."

US Order, which originally developed the Telesmart 4000 under the internal name "Falcon," is marketing its smart telephone and package of interactive applications through a growing list of financial institutions that are introducing home banking. US Order is also marketing the phone through paging companies and will begin selling through retailers later in 1996.

Colonial Data designs, develops and markets telecommunications products that support intelligent network services being introduced by the leading domestic and international telephone operating companies. The company has concentrated its development and marketing efforts on products and services that support Caller ID and other intelligent network services. The company also repairs and refurbishes telecommunications products for its customers.

US Order develops and markets products and services for the financial services and telecommunications industries. The Company's financial service products include bank-branded customer service, voice response systems and data translation systems. Its telecommunications products include the PhonePlus and Telesmart 4000 smart telephones and a complete package of interactive applications. Over 40 banks and telephone companies currently use US Order's products and services.

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12/20/95

/CONTACT: Media: Richard L. Stern, 212-777-7722, or investors: Doug Poretz, 703-506-1778, both of US Order; or Walter M. Fiederowicz, Chairman of the Board, 203-355-3178, or investors: Donna Stein, Evan Smith or Courtney Levi, or media: Lee Foley, 212-850-5600, all for Colonial Data Technologies/

(USOR CDT)

CO: US Order Inc.; Colonial Data Technologies Corp.
ST: Virginia, Connecticut
IN: TLS FIN
SU: PDT

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01330185 Supplier Number: 46017870 (THIS IS THE FULLTEXT)
COLONIAL DATA AND US ORDER INTRODUCE FIRST POPULARLY-PRICED ADSI SMART
PHONE WITH ADVANCED FUNCTIONS; Telesmart 4000 is a "Breakthrough" Product
that will Create Home and Business Mass Market First Demonstration of
Telesmart 4000 is at CES Winter Show in Las Vegas (Booth 17772).

Business Wire, p12201085

Dec 20, 1995

TEXT:

NEW MILFORD, Conn. and HERNDON, Va.--(BUSINESS WIRE)--December 20,
1995--Colonial Data Technologies Corp. (AMEX:CDT) and US Order
(Nasdaq:USOR) today introduced a revolutionary ADSI smart phone, Telesmart
4000 (TS 4000), that for the first time, gives consumers popularly-priced
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The Telesmart 4000 will be priced under \$200 wholesale, which is
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The companies said they believe that the Telesmart 4000 is a breakthrough
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Telesmart 4000 users, the companies noted, can send E-mail over the
Internet, pay **bills** and **bank** electronically, type and
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the phone's screen for autodialing or downloading into the **phone's**
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firsts to a popularly priced smart telephone, including digital signal
processing capability, a backlit graphics screen, a high-quality two- way
speaker, a typewriter-style keyboard, and a magnetic card reader for
electronic banking and home shopping.

Colonial Data and US Order, which formed a strategic relationship to
design, manufacture and market a line of ADSI-compatible smart telephones
like the Telesmart 4000, said they will demonstrate the new smart phone and
its applications for the first time at Colonial Data's booth at the Winter
CES in Las Vegas at the Sands Expo (booth 17772). They said that
manufacturing has begun based on advanced orders from several telephone
companies and banks, and that they will begin shipping the phones in March.

"The Telesmart 4000 is the phone of the future," said Walter M.
Fiederowicz, Chairman of Colonial Data. "We are hitting the market in 1996
just as the major telephone companies begin to roll out their ADSI-based
services, and banks begin large rollouts of electronic banking."

"The ADSI software provides enormous call management flexibility,"
added Fiederowicz. "The Telesmart 4000 can receive Caller ID and integrate
it with Call Waiting. This allows users to identify who is holding on Call
Waiting from the name and phone number that appears on the graphics screen.
They can choose to take the call, place it on hold, ask the caller to wait,
deliver specific answering messages, and automatically redial the second
caller later. Most telephone companies will be offering versions of this
service in 1996."

"The advanced telephone and electronic banking services are important
new sources of revenue for telephone companies and financial institutions,"
pointed out John C. Backus, President and Chief Operating Officer of US
Order. "Both will require the Telesmart 4000 for maximum sales penetration
because it is based on industry wide standards and is technically advanced

yet reasonably priced for a mass market."

Backus of US Order explained, "We have great expectations for the Telesmart 4000 because at a price below \$200 it delivers many of the capabilities of expensive computers in a simple and less threatening way. Because consumers at all technology levels are comfortable with telephones, we believe that both "low-tech" and computer-savvy users alike will find smart telephone-based services more accessible and easier to use than through their PCs."

"This is a breakthrough product," explained Fiederowicz. "A modem facilitates downloading of new software to the Telesmart 4000 once additional services are introduced by the Company and ordered by the consumer. The modem also allows for remote technical assistance and servicing."

"It is also important to note," said Fiederowicz, "that the Telesmart 4000 is the first richly functional smart phone that conforms fully to ADSI, the analog display services interface standard developed for advanced network services by Bellcore, the research and certification laboratory jointly owned by the regional Bell operating companies."

The companies said that in addition to supporting the ADSI standard, it also conforms to the TAP specifications used by the paging industry, which means the Telesmart 4000 paging message function works with all the major paging services.

The two companies also said the Telesmart 4000 is currently undergoing compliance certification by Bellcore, with complete results expected in January. The process is considered a prerequisite by most major telephone companies for choosing suppliers of smart telephones.

Colonial Data, which manufactures and distributes the phones to telecommunications companies, also said that it has begun production to meet initial launch orders from several major phone companies. "We are extremely pleased with the launch orders and the strong support from our telco customers for our first ADSI smart phone," said Fiederowicz. "We share US Order's expectations for the Telesmart 4000. Our collaboration with US Order has significantly shortened our time to market for this product."

US Order, which originally developed the Telesmart 4000 under the internal name "Falcon," is marketing its smart telephone and package of interactive applications through a growing list of financial institutions that are introducing home banking. US Order is also marketing the phone through paging companies and will begin selling through retailers later in 1996.

Colonial Data designs, develops and markets telecommunications products that support intelligent network services being introduced by leading domestic and international telephone operating companies. The Company has concentrated its product development and marketing efforts on products and services that support Caller ID and other intelligent network services. The Company also repairs and refurbishes telecommunications products for its customers.

US Order develops and markets products and services for the financial services and telecommunications industries. The Company's financial service products include bank-branded customer service, voice response systems and data translation systems. Its telecommunications products include the PhonePlus and Telesmart 4000 smart telephone and a complete package of interactive applications. Over 40 banks and telephone companies currently use US Order's products and services.

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0976018 NYW017
US ORDER AND COLONIAL DATA'S REVOLUTIONARY SMART PHONE RECEIVES PRESTIGIOUS
INDUSTRY AWARD

DATE: July 24, 1996 08:37 EDT WORD COUNT: 805

HERNDON, Va. July 24 /PRNewswire/ -- US Order (Nasdaq: USOR) and Colonial Data Technologies Corp. (Nasdaq: CDTX) announced today that their revolutionary smart phone, sold under the Intelifone and Telesmart brands won the prestigious Smart Telephone Design award Monday night from the Interactive Services Association (ISA) in San Diego at its annual convention. The smart telephone was one of 18 award winners from a field of over 300 entrants. The judges applauded the integration of a full QWERTY keyboard, graphics display screen and magnetic stripe card reader at an affordable price point. The two companies authorized factory production to begin immediately.

"Our smart telephone officially launches the much-talked-about new 'information appliance industry,' combining many of the features of a computer and the services of the Internet in a low cost, smart telephone. We expect to have the Intelifone, retailing at \$299, available on over 2,500 retail shelves beginning around Labor Day," said US Order President John Backus. Backus also noted, "The 1996 ISA award is the latest recognition of our continuing leadership in the smart **phone** industry."

The company won **Consumer** Electronic Show awards in 1994 and 1996, and its PhonePlus banking application won an ISA award in 1995.

Herndon, Va.-based US Order, the designer of the smart phone, in 1995 formed a strategic alliance with CDT to manufacture and market the phone. The Smart phone is marketed by CDT to an impressive list of telephone companies under the Telesmart 4000 name, and is marketed by US Order to

retailers and other outlets as the Intelifone 2000.

"By combining direct sales via major telephone companies, major retail programs, and direct to consumer sales through CDT's Worldwide Telecom joint venture we will be reaching a potentially enormous consumer base just as telephone companies are making more advanced intelligent network services available," said Bob Schock, president and chief executive officer of CDT. "The Telesmart will be aggressively priced to our telco customers," Schock added.

The smart phone is designed with a combination of state-of-the-art features currently unavailable to consumers. Among the phone's more advanced functions is its ability to allow users to simultaneously take advantage of call waiting, caller ID and voice mail services available from telcos. Beginning this fall users will also be able to send e-mail over the Internet, pay **bills** and **bank** electronically, type and **send text** messages directly to alphanumeric pagers, and use integrated pocket organizer features. One of the smart phone's more popular functions is electronic national directory assistance, which visually displays telephone numbers and addresses on the phone's screen for autodialing as well as downloads them into the phone's 500-name and address, 1,500 number **personal** directory.

Among the smart **phone**'s other advanced functions are digital signal processing capability, a backlit graphics screen, capable of displaying high resolution icons and logos, high-quality two-way speaker phone capability, a typewriter-style keyboard, and a magnetic card reader.

US Order also announced the introduction of its SmartTime Network Service Bundle, to be available this fall on its smart phone. For a \$7.95 per month flat price consumers will have access to sending unlimited Internet e-mail and alphanumeric paging, electronic directory assistance, data backup, stock quotes, sports scores, weather, lottery, and horoscopes. Consumers will be able to use these services for 30 days at no charge.

CDT designs, develops and markets telecommunications products that support intelligent network services being introduced by the leading domestic and international telephone operating companies. The company has concentrated its development and marketing efforts on products and services that supply Caller ID and other intelligent network services. The company also repairs and refurbishes telecommunications products for its customers.

US Order develops and markets products and services for the financial services and telecommunications industries. The company's financial service products include bank-branded customer service, voice response systems and data translation systems. Its telecommunications products include the Intelifone 2000/Telesmart 4000 smart phone plus a complete package of interactive applications. Over 50 banks and telephone companies currently use the company's products and services.

"Safe Harbor" statement under the Private Securities Litigation Reform Act of 1995: This release contains forward looking statements that are subject to risks and uncertainties, including, but not limited to, the impact of competitive products, product demand and market acceptance risks, reliance on key strategic alliances, fluctuations in operating

results, delays in development of highly complex products and other risks detailed from time to time in US Order and CDT's filings with the Securities & Exchange Commission. These risks could cause the company's actual results for 1996 and beyond to differ materially from those expressed in any forward looking statements made by, or on behalf of, US Order and CDT.

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(USOR CDTX)

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04243825 Supplier Number: 46213702 (THIS IS THE FULLTEXT)
Electronic payment firm banks on unbanked clients
Crain's New York Business, p12
March 11, 1996

TEXT:

FREDERICK GABRIEL

A small New Jersey company has targeted New York City as the next frontier in its bid to offer electronic payment services nationwide.

The company, In-Person Payments Inc., claims that it is signing up to six local merchants a day for a system that lets people without checking accounts pay bills at supermarkets, pharmacies and check-cashing stores.

'New York City has a very large population of 'unbanked' (consumers),' says IPP President Marvin Morris, who grew up in the East New York section of Brooklyn. 'We think there's a lot of business for us there.'

The 'unbanked' refers to the estimated 31% of the U.S. population that does not have checking accounts. Typically, these people live in low- to moderate-income neighborhoods or are recent immigrants.

IPP's system is simple. A customer presents a bill and a cash payment to the retail agent who in turn enters the transaction into IPP's computer **terminal** and gives the **customer** a receipt. The agent's computer automatically dials into IPP's system and transfers the payment information. IPP then **transmits** the data to the **biller** for **credit** to the customer's account.

The agent is also expected to deposit the cash into a local bank within 24 hours. IPP automatically retrieves the payment from that account and forwards it. If for any reason IPP is unable to collect the money out of the retailer's account, the merchant's system is shut down, says Mr. Morris.

Customers are charged \$1 for each payment made, a portion of which the retailer keeps. That's the same price or cheaper than a money order, the major alternative for these consumers.

While the utilities have been installing proprietary bill payment systems at supermarkets, drugstores and other retail outlets for several years, IPP's system consolidates all of the utilities' systems under one network. And it greatly expands the number of bills that may be paid at a retail outlet.

IPP operates in New Jersey, eastern Pennsylvania and Maryland, and has a total of 180 retail merchants using its system, including department stores, cable companies and utilities.

While 3-year-old IPP only received a New York state Banking Department

license that allows it to transmit money in the state in January, the Wayne, N.J.-based business has already signed up such companies as Consolidated Edison Co. of New York and Nynex Corp.

IPP is currently processing 100,000 payments a month, about 30,000 of which are from New York City customers, says Mr. Morris.

For about 25% of the transactions, the company utilizes New York money-center giant Citibank's automatic bill-paying network. For the rest, IPP deals directly with the billets themselves.

So far, IPP has signed up 60 merchants in New York City and is negotiating contracts with about 40 others. The company expects to add another 400 to 500 retailers over the next 12 months, says Mr. Morris.

'That should be enough for the five boroughs,' he says. 'We don't want to put one on every street corner, because the service is also intended to draw customers into the stores of these merchants.'

But IPP's system seems unlikely to foment an electronic-bill-paying revolution in New York City, at least at any time soon.

'There's a learning curve associated with this,' says Ira Kell, chief financial officer of Bronx-based David's Money Centers, which offers the IPP system at its check-cashing centers in New Jersey and plans to unroll it at its 20 New York City centers this month. 'It's not a loss leader, but it's going to take time to get people to break the habit of paying by money order.'

In the meantime, IPP is also hatching plans to work with banks, including Citibank, that are involved in the electronic delivery of welfare and other public benefits. Mr. Morris says that the company's software and hardware already have the capability to handle electronic benefit transfers.

'It's something that is in the planning stages right now,' he says. 'But this would be a perfect vehicle for welfare recipients to collect their payments and pay their bills at the same time.'

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03348059 Supplier Number: 44637354
The Race to Offer HOME Banking
Bank Marketing, v0, n0, p15
May, 1994

ABSTRACT:

Ameritech and Citicorp will jointly offer telephone banking services using screen phones in metropolitan Chicago, IL, in spring 1994, according to Mitch Perlitch, general mgr of financial service with Ameritech. The phone features a typewriter-type keyboard and a digital display screen, allowing customers to pay bills, make securities transactions, view credit card information and transfer funds. The service is one of many that will soon offer banking customers a way to control their finances by **phone**, television and **personal** computer. Visa USA and Crestar Financial are also offering a special home banking program to customers holding Crestar's Premier MoneyCard in Washington, DC. US Order has developed the screen phone, which features a magnetic stripe card reader and a bar card reading pen. The pen can be used to read bar codes of mail order merchants and companies **sending bills** for payment. Crestar **Bank** will

provide the payment authorization. Meridian Bancorp (Reading, PA) is offering its PC-based Advanage Home Banking service based on Prodigy and its Advantage Phone Banking touch tone phone service. Barnett Banks (Jacksonville, FL) is also offering its Barnett Audio Response Telephone banking service and its home banking service through Prodigy, as research revealed consumers would not purchase a special device just for home banking.

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03054609 Supplier Number: 44156299 (THIS IS THE FULLTEXT)

Laws forcing 900 to change its tone

Crain's New York Business, p26

Oct 11, 1993

TEXT:

By SHARON McDONNELL

Read a music review or an ad for Billy Joel's latest album in New York Newsday or Spin magazine - then listen to excerpts from the recordings by making a 95-cents-a-minute phone call to Music Access, a Brooklyn-based company. Or tune into current business news headlines or stock quotes by dialing The Wall Street Journal's Journal-Phone at the same price.

These are only a few of the many New York companies that will be affected by Federal Trade Commission regulations for 900-number services that take effect Nov. 1.

Once identified with party lines and steamy adult sex lines, 900 numbers are increasingly used in mainstream marketing by Fortune 500 corporations, publishers, television and movie companies, consumer products manufacturers, law firms, counseling services, non-profits and even government.

'Establishing a 900 number is just another way of publishing and selling information. It brings the information age into virtually every U.S. home,' says William Burrington, executive director of the National Association for Interactive Services, a Washington-based trade group for the pay-per-call industry.

Some of the FTC regulations are considered 'old news' by industry experts. Federal Communications Commission regulations issued in December 1991 required the long-distance telephone companies that carry 900 lines to adopt guidelines for price disclosure and consumers' ability to block 900 usage from their homes. Other new rules, however, set tough standards for advertising the numbers and curb some abuses common in the industry.

'The FTC rules add firepower to previous regulations, and send a clear signal to the industry to walk a straight and narrow path,' says Mark Plakias, an analyst at Strategic TeleMedia, a New York-based consulting firm. 'There is now a national umbrella that codifies practices followed by different states and consumer advocates.'

Ads must stress price

Advertisements now must carry the price for a 900 call adjacent to the telephone number, in the same format - visual, oral or both - as the number, in print at least half the size of the number. The price for calls that cost more than \$2 must be disclosed in the preamble of the call, and callers must be advised that they can hang up in three seconds without having to pay for the call. Dow Jones & Co. has followed this format for its Wall Street Journal Journal-Phone, although it now has to print the

calls' price larger in its ads.

'Anyone who operates a legitimate 900 phone service through AT&T has been required to do price disclosure by AT&T,' says Bar Biszick, who is the president of Music Access, which has used a price preamble for more than 18 months.

For the past four years, New York state's Public Service Commission has ordered a price preamble for calls costing more than \$3.50, and the option for callers to hang up within 20 seconds without charge. Telephone service could not be disconnected for failure to pay 900 bills. Callers also were given a one-time opportunity to delete 900 charges from their bills where calls were made without their knowledge - by children in their homes, for example.

Ads to children under age 12 are banned under the new FTC rules unless a bona fide educational service is provided. A cartoon character who offers to talk to children and send them math cards would not be permitted since the educational content, the card, is 'incidental' to the call, the FTC says. For children over 12 but under 18, ads must say that parental permission is required before calling the service - in print at least half the size of the phone number.

These rules will probably end a children's story program marketed by Phone Programs Inc., a New York-based company that also offers Sports Phone. Phone Programs was one of several companies that reached settlements with the FTC over the past year for 'deceptively' advertising 900 lines to children.

The FTC rules also establish new requirements for billing, resolving billing disputes and handling customer complaints. A short description of 900 calls and a toll-free 800 number to contact the carrier will appear on a **customer's phone bill**. Written acknowledgement of complaints will be given within 40 days. Disputed calls can be removed from the phone bill, but still remain collectible by either the long-distance carrier or the 900 **provider**. Once a year, local phone companies will be required to **send** customers a '**bill of rights**' on 900 numbers.

Mr. Plakias of Strategic TeleMedia says 1992 was the year 900 services 'crashed and burned' under regulatory and legislative restraints, rampant fraud and uncollectible debt, and overall image problems - but evolved into a 'more mature but drastically slimmed down industry.'

The future for the 900 industry depends on whom you talk to.

Reduced 900 involvement

'It remains to be seen whether there is any future in the 900 business,' Bruce Fogel, chairman of Phone Programs Inc., a big provider, says. While his Sports Phone is healthier than ever, he notes he cut his involvement in 900 numbers '2,000% to 10,000%' in 1990, and now concentrates mainly on 800 numbers for product testing and promotion for companies like Kraft General Foods and PepsiCo Inc.

According to Strategic TeleMedia, the industry will show 'moderate and gradual growth,' with revenues of \$588 million projected for 1993, soaring to \$865 million in 1996. Public opinion polling, public-sector information lines, and business support and information lines are areas displaying the most growth. Sex numbers and lines offering questionable value are dwindling the most.

Says Laura Dalton, managing editor of InfoText, a trade magazine covering the interactive phone industry, 'It's moving away from an entrepreneurial industry to one where advertisers and marketers can disseminate their information and gain better relationships with consumers.'

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05582611 SUPPLIER NUMBER: 11595399 (THIS IS THE FULL TEXT)
Automated imaging in financial services.
Urrows, Henry; Urrows, Elizabeth
Document Image Automation, v11, n5, p259(16)
Sept-Oct, 1991

TEXT:

Automated Imaging in Financial Services

This overview tells how image systems can become more important in commercial spheres threatened with insolvency - requiring lessened costs, fewer errors, and faster transaction speeds, as they circumvent often meager literacy or inattention among clerical employees. Many banks, insurance companies, and accounting firms gravitate to technology in their strivings toward threshold competence and survival amid competitive pressures. And yet automation is but one part of their larger picture - no cure-all, because how is more crucial than whether it applies.

Financial markets can serve up image management system success stories galore. Yet many of the 12,926 U.S. commercial banks and forty-eight-hundred-plus insurance companies lag in taking advantage of demonstrably effective ways to upgrade long-prevalent, relatively cumbersome, labor intensive, and inefficient practices. There are widespread assumptions that image systems will spread fast.

When Image Systems magazine began publishing in October 1990, editorial director Walt Novinger wrote that the publication was begun "in response to a dynamic and maturing Electronic Image Management (EIM) marketplace." The new monthly was intended "to help find answers to the question what EIM could do for their businesses and what pitfalls they might experience."

In the April 1990 Integrated Image (issued by Wang Laboratories), Thornton May, director of imaging research at KPMG Nolan Norton Institute, wrote that vendors projected a baseline for imaging hardware "in the \$2 billion range in 1992. The most optimistic vendor projection pegs imaging hardware (66 percent), software (26 percent), and service sales (8 percent) in 1992 at \$12 billion." Professional analysts, consultants, and service firms had a kindred broad range of future visions: "The lowest projection of imaging hardware sales in 1992 is \$2.3 billion, while the highest is Nolan Norton's estimate at \$4.5 billion worldwide."

When we talked with him in February 1991 he held to that expected scale. Even though government agencies were then the largest users of imaging systems, May predicted that by 1992 financial services would "eclipse government as the largest vertical market for imaging equipment. Already, virtually every major financial services player has incorporated imaging capabilities into its technology infrastructure, and the critical determinant of market success has become not whether you do imaging, but how well you do it."

Bankers, May wrote, "for the most part remain locked in the grip of creeping incrementalism. . . . [S]ome banks are moving forward aggressively with the technology. . . ." Bank of Boston and Chase Manhattan, for instance, have imaging initiatives of note.

But the keystroke-reduction-driven exercises being contemplated by back-room types at many banks should not

be construed as strategic planning.

We place the 1992 sale of imaging equipment to the U.S. banking market in the \$450 million range, and the majority of these purchases will be by a small subset of 'smart' money-center banks. Our projection may seem low, but we cannot be bullish about the future of imaging in the banking market. . . .

May also said that surveys of management attitudes showed that 15 percent of U.S. insurance companies had incorporated imaging into their information technology infrastructures, while 55 percent had tactical pilots in place and 30 percent were still examining the technology. He observed that "as in the financial services sector, it will not be a question of whether the insurance company does imaging, but how well it does it."

Banking

Stories in the weekly American Banker support this impression. In the April 19, 1989 issue, staff writer Yvette D. Kantrow analyzed a Bank Administration Institute canvass of 361 commercial banks with over \$1 billion assets. The 20 percent response came, half from banks with \$1 to \$5 billion, half with more.

Over three out of four

said they had an interest in applying the technology to their lockbox operations or have already done so. . . . [B]ankers expect to spend significantly less for their lockbox areas than on imaging systems for check processing. Nearly half anticipate a cost of less than \$1 million for adding imaging systems to their lockbox operations. Eight respondents supplied BAI with actual cost figures, with the majority of purchases ranging from \$1 million to \$2 million.

Nearly half the respondents planned to install imaging systems for check processing between 1991 and 1993. Of these, about 18 percent said they would spend \$1 million to \$1.9 million; 30 percent expected to spend \$2 million to \$5 million, while 10 percent thought that they would invest more.

On Nov. 8, 1989 Jeanne Dugan Cooper described an American Bankers' Association-commissioned study which found that "bankers who embrace image-processing technology are going to be ahead of the game in the next decade." Conducted by the consulting firms Littlewood, Shain & Co. and Andersen Consulting division of Arthur Andersen & Co., this study found that

The potential cost saving has not yet been enough to spur banks into using image processing. A major roadblock is the initial capital outlay . . . [T]o integrate all its systems to image-based technology a bank would have to spend roughly 0.1 percent of assets. For a \$3 billion-asset bank, that cost would be about \$3 million.

"It's a lot of money in an area that banks in the recent past have not been used to spending a lot of capital on," Mr. [John] Shain said.

But the Shain-Andersen ABA study aims to justify those costs, contending that bankers would earn their money back in three to five years, based on the number of staff reductions.

Initial cash outlay was not the only constraint. An average image conversion takes about two years to complete, according to Shain, and a bank would have to carry the costs of both the old and new systems in the interim.

Shain contended the most immediate savings was in work involved in check encoding, where a bank can cut staff by half. Cooper wrote that "some bankers, however, challenge those figures."

Cooper also spoke to Robert E. Young, senior vice president at First Tennessee Bank (Memphis), said to be "among banking's image-processing pioneers . . . piloting a program that uses optical systems to search and retrieve data." Young estimated that his experiment would shrink the back-office work-force from 10 percent to 20 percent instantly, then "[substantially] as the technology proliferates."

Jeanne Iida had two 1991 American Banker articles on our topic. Her Feb. 6, 1991 feature under "Technology/Operations" carried the banner "File-Folder Imaging Gains as Lower-Cost Path to Efficiencies." She explained that

Although projects to capture check images frequently grab the spotlight, many banks are quietly revolutionizing other back-of-office operations . . . using what is called file-folder or document imaging [to] streamline a variety of operations by replacing reams of paper files with electronic ones. [Some] claim productivity gains of as much as 30 percent after installing such systems in customer service, credit cards, consumer lending, corporate trust, and other paper-intensive businesses.

Iida wrote that less expensive, faster payback document imaging systems might prove more useful than check imaging ones, which were "just beginning to materialize and whose benefits are unproven." Charles W. McDonough, a partner at Andersen Consulting Co., forecast that file-folder technology "clearly . . . will have a much wider appeal . . . particularly in the short term." Such big banks as Citicorp, Security Pacific, and Chemical Bank "have used imaging for a few years in customer service areas [and] are branching out into other applications."

Check imaging uses high-speed readers and sorters. File-folder systems can put "ordinary personal computers, fitted with special software and monitors," to work. "The documents are then put on an optical storage unit and can be called up later on a workstation."

Iida wrote that productivity can increase (1) by more rapidly processing loans or responding to customer inquiries, and/or (2) eliminating some steps used in a paper environment. A small file-folder system "can be installed and tested for less than \$1 million"; Andersen's McDonough said, "For \$500,000, a small bank could go a long way."

In "Big Players Taking a Shine to Imaging Systems," Iida reported on American Banker's own 1990 technology survey of 171 banks with at least \$250 million in deposits. A pie-chart ran in italics "More than a fifth of larger banks plan to use imaging by 1991. Slices showed that 6 percent had systems then installed, with 15 percent planing to have imaging in use by the end of 1991.

The survey disclosed that big banks had aggressive plans to install image processing systems, "but most smaller banks still find themselves precluded from experimenting with the new technology."

27 percent of banks with more than \$2 billion in deposits plan to have image systems in place by the end of next year - three times the number that say they already have such systems installed.

Indicating that image processing is, at least for now, a big-bank luxury, only two of the 240 banks in the survey with less than \$750 million in deposits have installed the technology. Another 26, or 11 percent, said they planned to install it by the end of 1991 - well below the 27

percent of the biggest banks polled.

Under the subtitle Best Systems Cost Much, Iida wrote that "the high cost and complexity of high-speed transaction processing systems . . . are too pricey for the majority of banks. Check processing systems, for example, start at a couple of million dollars." Huntington Service Company, the operations subsidiary of Huntington Bancshares, Inc. (Columbus, OH), planned to have a check-processing system installed by year's end that would process one million checks per day. Manager of Operations Support Roger Elsom, who oversaw the conversion to imaging, thought that only large banks could afford similar systems. "Smaller institutions don't have the volume to drive the profitability," he said. "Eventually, larger institutions are likely to market these services to smaller ones, which will bring down the cost to smaller banks."

Elsom predicted that this would not happen soon, because "right now bigger institutions have their hands full just figuring out their own applications."

Will Results at Lower Costs Sedate Fears?

"How the Gateway Bank (Norwalk, CT) saved \$100,000 a year" using PC-based optical disks was the subject of ComputerWorld staff writer Michael Alexander's first-rate Feb. 11, 1991 story, told through the eyes and voices of Gateway Senior Vice President Martin Brennan and President David DiVincenzo of Integrated Financial Systems AVAR (New Haven, CT). Alexander's account opens admirably:

The vendors and value-added resellers who trooped through Martin Brennan's office in 1987 pitching document imaging systems simply did not get the picture.

"I kept asking them, 'What are we saving?' recalls [Brennan] . . . [What we] needed was not a way to store documents but a substitute for microfiche. Gateway, a medium-size bank with \$1.3 billion in assets, was spending \$130,000 per year to have tapes from the bank's IBM 4341 copied to microfiche.

None of those who came to pitch their document storage solutions were interested in solving the bank's microfiche problem, Brennan says. "In 1987, they told me it couldn't be done, and that didn't make sense to me," says the veteran of more than 25 years in bank information systems management.

Brennan persuaded Gateway to spend twelve thousand dollars for what Alexander termed "then-unproven personal computer-based optical disk technology." DiVincenzo, whose firm developed the system, pointed out how "banks have a cautious attitude toward capital expenditures"; Gateway "went out on the edge . . . and realized a benefit starting in 1988, while everyone else sat on the sidelines." The initial system installed at the Newton, CT operations division had

a no-frills IBM Personal Computer AT, a 5.25-inch WORM optical disk drive, a tape station, and a printer.

All the equipment was from IBM. "This is an all-IBM shop, and they wanted to be able to get the equipment fixed easily if there was a problem," DiVincenzo says.

IFS developed the software needed to archive and retrieve the reports easily once they had been stored on optical disks.

Payoff was prompt. Brennan states that "in the first month, we saved \$2,000 on microfiche. From there, it got to be a snowball." Following early success, all filing shifted to optical disk in 1988. Among fourteen applications stored on WORM disks are customer and commercial checking,

savings accounts, installment loans, and mortgages. The bank plans to add a fourth PC equipment with an optical disk drive in 1991, with a "mirror image of the setup in operations . . . installed at bank headquarters."

Few of the reports are ever printed on paper. When the auditors want to look at the general ledger . . . they no longer have to leaf through a 900-page report on computer paper. They merely pop a pocket-size disc into a drive and enter a few simple keystrokes to retrieve data.

"One month into the project, the general ledger was off by nine cents," Brennan recalls. "Tell a banker [that and] you might as well say it was off by \$1 million." The error was uncovered in a few minutes instead of a few hours.

A single 5.25-inch WORM disk stores one month's information per application. Saving are \$100,000 a year for the past three years: spending about \$21,000 per year for disks instead of the annual \$130,000 to a service bureau to transfer tapes to microfiche. Tape transfers, now done on-site instead of being sent out, shrank turnaround time from three days to four hours. Other comforts:

Clerks no longer have to spend several hours checking microfiche returned from the service bureau for quality and completeness. Nor do they have to maintain a log or track records and microfiche that must be returned for reprocessing when faulty. . . .

"Before, we had to manually retrieve the microfiche, and that took about 28 minutes," Brennan says. "Now, it takes three to five seconds to find the same information." The bank can now react to a customer's request for a statement virtually overnight. . . . [T]wo fewer clerks are now needed to process statements and other banking records. The systems has also helped the bank get out from behind on ongoing five-week backlog of requests for copies of customer statements and reports from the Internal Revenue Service.

According to DiVincenzo, IFS has since sold fifteen Optical Disk Information Networks to other banks to replace their microfiche systems. Brennan is now researching what would be needed to move images of checks on rolls of photographic film onto optical disks. The current system records only the magnetic ink OCR line at the bottom edge of checks. When the image of an entire check is required, clerks must retrieve it from film and have it processed into hardcopy. The process gobbles up staff time, Brennan complains, since "90 percent of the look-ups are for checks." He needs a document imaging system for checks, but asserts that he "can't just yet get what he wants."

In their "Evaluating Image Systems" article for the Dec. 1990 Systems 3X & AS World, Bill Topel and Renee Robbins wrote that "while some systems' paybacks may be hard to measure, others are easy." They noted how Commonwealth Bank & Trust Co. (Williamsport, PA), which serves eleven counties with thirty-five offices, searched for an imaging solution to centralize its scattered consumer loan archives. It chose Metafile Information Systems (Rochester, MN) as systems integrator because of the ease of use shown by its Metaview package, which works on existing hardware for a reasonable price. The pilot system cost about eighty thousand dollars. According to assistant vice president for information systems Richard Ludwig.

With about three-quarters of a million pages of outstanding loan documents, another half-million pages

<-----User Break----->

Summer 1990 issue of On Track, the in-house publication of Financial Systems & Equipment Corp., a Texas-based systems integrator.

Banking:

- * New accounts processing
- * signature verification
- * microfiche replacement
- * loan applications with associated documentation such as credit reports, personal and bank references, letters of credit, credit bureau reports, financial statements, and collateral information.

Financial Services:

- * Credit card applications
- * charge card receipts
- * credit reports

Insurance:

- * Policies, riders and attachments
- * claims forms
- * damage reports, photographs, and cost estimates
- * medical reports and invoices
- * underwriter agreements
- * other correspondence

We kept learning that many of the published reports are about pilot u!
? t s8/3/1-35

8/3/1 (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2004 ProQuest Info&Learning. All rts. reserv.

01114996 97-64390
Electronic payment systems: What all marketers need to know
Weiss, David
Telemarketing v14n3 PP: 106-109 Sep 1995
ISSN: 0730-6156 JRNL CODE: TLM
WORD COUNT: 2008

8/3/2 (Item 1 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
(c) 2004 The Gale Group. All rts. reserv.

1433073 Supplier Number: 01433073 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Electronic payment firm banks on unbanked clients
(Some 31% of US population doesn't have checking accounts; IPP offers system that allows people to pay bills at nonbank venues)
Crain's New York Business, v XII, n 11, p 12
March 11, 1996
DOCUMENT TYPE: Journal ISSN: 8756-789X (United States)
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 693

8/3/3 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2004 The Gale Group. All rts. reserv.

01353709 SUPPLIER NUMBER: 08411052 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Verifone UK wins #1M deal to cut W H Smith customer waiting time.
(installing 1,900 EFTS terminals at retail stores)
Computergram International, n1418, CGI05030010
May 3, 1990
ISSN: 0268-716X LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 390 LINE COUNT: 00031

8/3/4 (Item 1 from file: 476)
DIALOG(R)File 476:Financial Times Fulltext
(c) 2004 Financial Times Ltd. All rts. reserv.

0005053745 B09IIAKAFFFT
Lloyds Bank places order for 2,000 eftpos terminals
ALAN CANE
Financial Times, P 5
Saturday, September 9, 1989
DOCUMENT TYPE: NEWSPAPER LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
Word Count: 293

8/3/5 (Item 1 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)
(c) 2004 The Gale Group. All rts. reserv.

01408145 Supplier Number: 46567795 (USE FORMAT 7 FOR FULLTEXT)
Colonial Data and US Order's revolutionary Smart Phone receives prestigious
industry award; Volume production begins immediately.
Business Wire, p07241137
July 24, 1996
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 808

8/3/6 (Item 2 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)
(c) 2004 The Gale Group. All rts. reserv.

01333072 Supplier Number: 46045871 (USE FORMAT 7 FOR FULLTEXT)
COLONIAL DATA RECEIVES INNOVATIONS 96 AWARD FOR TELESMTART 4000 ADSI SMART
TELEPHONE.
Business Wire, p01051092
Jan 5, 1996
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 700

8/3/7 (Item 3 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)
(c) 2004 The Gale Group. All rts. reserv.

01330491 Supplier Number: 46019770 (USE FORMAT 7 FOR FULLTEXT)
US ORDER AND COLONIAL DATA INTRODUCE FIRST POPULARLY-PRICED ADSI SMART
PHONE WITH ADVANCED FUNCTIONS

PR Newswire, p1220NYW035
Dec 20, 1995
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 1101

8/3/8 (Item 4 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)
(c) 2004 The Gale Group. All rts. reserv.

01330185 Supplier Number: 46017870 (USE FORMAT 7 FOR FULLTEXT)
COLONIAL DATA AND US ORDER INTRODUCE FIRST POPULARLY-PRICED ADSI SMART
PHONE WITH ADVANCED FUNCTIONS; Telesmart 4000 is a "Breakthrough" Product
that will Create Home and Business Mass Market First Demonstration of
Telesmart 4000 is at CES Winter Show in Las Vegas (Booth 17772).
Business Wire, p12201085
Dec 20, 1995
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 1050

8/3/9 (Item 1 from file: 813)
DIALOG(R)File 813:PR Newswire
(c) 1999 PR Newswire Association Inc. All rts. reserv.

0976018 NYW017
US ORDER AND COLONIAL DATA'S REVOLUTIONARY SMART PHONE RECEIVES PRESTIGIOUS
INDUSTRY AWARD

DATE: July 24, 1996 08:37 EDT WORD COUNT: 805

8/3/10 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2004 The Gale Group. All rts. reserv.

04243825 Supplier Number: 46213702 (USE FORMAT 7 FOR FULLTEXT)
Electronic payment firm banks on unbanked clients
Crain's New York Business, p12
March 11, 1996
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Tabloid; Trade
Word Count: 679

8/3/11 (Item 2 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2004 The Gale Group. All rts. reserv.

03348059 Supplier Number: 44637354
The Race to Offer HOME Banking
Bank Marketing, v0, n0, p15
May, 1994
Language: English Record Type: Abstract
Document Type: Magazine/Journal; Trade

8/3/12 (Item 3 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2004 The Gale Group. All rts. reserv.

03054609 Supplier Number: 44156299 (USE FORMAT 7 FOR FULLTEXT)
Laws forcing 900 to change its tone
Crain's New York Business, p26
Oct 11, 1993
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Tabloid; Trade
Word Count: 947

8/3/13 (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2004 The Gale Group. All rts. reserv.

05582611 SUPPLIER NUMBER: 11595399 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Automated imaging in financial services.
Urrows, Henry; Urrows, Elizabeth
Document Image Automation, v11, n5, p259(16)
Sept-Oct, 1991
ISSN: 1054-9692 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 13035 LINE COUNT: 01060

8/3/14 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

00801928
Method and system for bill presentation and payment reconciliation
Verfahren und System zur Presentation von Rechnungen und zur
Bezahlungsabereinstimmung
Methode et systeme pour la presentation de notes et pour la reconciliation
des priements

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,
Armonk, N.Y. 10504, (US), (Applicant designated States: all)

INVENTOR:

Bednar, Gregory M., 2405 Hidden Trail CT., Matthews, NC 28105, (US)
Carr, Thomas E., 3329 Whistley Green Dr., Charlotte, NC 28269, (US)
Donahue, James W., 3800 Browne's Ferry Road, Charlotte, NC 28269, (US)
Hendrix, Robert F., Jr., 1923 Winsted Court, Charlotte, NC 28262, (US)
Kuklantz, Richard J., 9411 Willow Glen Train, Charlotte, NC 28215, (US)
Ulrich, William A., Jr., 601 Highland Forest Drive, Charlotte, NC 28270,
(US)

LEGAL REPRESENTATIVE:

Schafer, Wolfgang, Dipl.-Ing. et al (62021), IBM Deutschland
Informationssysteme GmbH Patentwesen und Urheberrecht, 70548 Stuttgart,
(DE)

PATENT (CC, No, Kind, Date): EP 745947 A2 961204 (Basic)
EP 745947 A3 000105

APPLICATION (CC, No, Date): EP 96108411 960528;

PRIORITY (CC, No, Date): US 458931 950602

DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06F-017/60; G07F-007/10
ABSTRACT WORD COUNT: 70

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	1153
SPEC A	(English)	EPAB96	2106
Total word count - document A			3259
Total word count - document B			0
Total word count - documents A + B			3259

8/3/15 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

00775172

REAL TIME TELE-PAYMENT SYSTEM
ECHTZEIT-TELEBEZAHLSYSTEM
SYSTEME DE TELEPAIEMENT EN TEMPS REEL
PATENT ASSIGNEE:

Vazvan, Behruz, (2091894), Viulutie 7 B 25, 00420 Helsinki, (FI),
(Proprietor designated states: all)

INVENTOR:

Vazvan, Behruz, Lipurintie 7 B, 00620 Helsinki, (FI)

LEGAL REPRESENTATIVE:

Rosenich, Paul (74423), Patentburo Paul Rosenich AG BGZ, 9497 Triesenberg
, (LI)

PATENT (CC, No, Kind, Date): EP 739526 A1 961030 (Basic)
EP 739526 B1 011219
WO 9613814 960509

APPLICATION (CC, No, Date): EP 95935472 951025; WO 95FI591 951025

PRIORITY (CC, No, Date): FI 945075 941028

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; NL; PT;
SE

RELATED DIVISIONAL NUMBER(S) - PN (AN):
(EP 2001114153)

INTERNATIONAL PATENT CLASS: G07F-007/08; G07F-019/00; G06F-017/60;
G06F-157:00

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200151	5072
CLAIMS B	(German)	200151	5242
CLAIMS B	(French)	200151	6157
SPEC B	(English)	200151	4998
Total word count - document A			0
Total word count - document B			21469
Total word count - documents A + B			21469

8/3/16 (Item 3 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
 (c) 2004 European Patent Office. All rts. reserv.

00768144

A transaction terminal
 Transaktions-Terminal
 Terminal de transactions
 PATENT ASSIGNEE:

NCR International, Inc., (1449484), 1700 South Patterson Boulevard,
 Dayton, Ohio 45479, (US), (applicant designated states: DE;ES;FR;GB;IT)

INVENTOR:

Forrest, Simon J., 12 Bellefield Avenue (G/R), Dundee, Scotland DD1 4NJ,
 (GB)

LEGAL REPRESENTATIVE:

Cleary, Fidelma et al (85871), International IP Department NCR Limited
 206 Marylebone Road, London NW1 6LY, (GB)

PATENT (CC, No, Kind, Date): EP 720132 A2 960703 (Basic)
 EP 720132 A3 960828
 EP 720132 B1 990714

APPLICATION (CC, No, Date): EP 95309413 951222;

PRIORITY (CC, No, Date): GB 9426341 941229

DESIGNATED STATES: DE; ES; FR; GB; IT

INTERNATIONAL PATENT CLASS: G07F-019/00;

ABSTRACT WORD COUNT: 153

LANGUAGE (Publication,Procedural,Application): English; English; English
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9928	574
CLAIMS B	(German)	9928	544
CLAIMS B	(French)	9928	690
SPEC B	(English)	9928	6136
Total word count - document A			0
Total word count - document B			7944
Total word count - documents A + B			7944

8/3/17 (Item 4 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
 (c) 2004 European Patent Office. All rts. reserv.

00695857

Wireless banking terminal using cellular telephone communication.

Drahtloses Bankterminal mit Anwendung von zellularer
 Funksprechkommunikation.

Terminal bancaire sans fil utilisant la communication telefonique
 cellulaire.

PATENT ASSIGNEE:

TRANSACTION TECHNOLOGY, INC., (1175290), 3100 Ocean Park Boulevard, Santa
 Monica, CA 90405, (US), (applicant designated states:
 AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Kawan, Joseph Charles, 2034 Paramount Drive, Hollywood, California 90068,
 (US)

LEGAL REPRESENTATIVE:

Ebbinghaus, Dieter, Dipl.-Ing. et al (3183), Patentanwalte v. Funer,

Ebbinghaus, Finck Mariahilfplatz 2 & 3, D-81541 Munchen, (DE)
 PATENT (CC, No, Kind, Date): EP 662665 A2 950712 (Basic)
 APPLICATION (CC, No, Date): EP 95100091 950104;
 PRIORITY (CC, No, Date): US 177548 940105
 DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;
 NL; PT; SE
 INTERNATIONAL PATENT CLASS: G06F-017/60;
 ABSTRACT WORD COUNT: 85

LANGUAGE (Publication,Procedural,Application): English; English; English
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	3115
SPEC A	(English)	EPAB95	16448
Total word count - document A			19563
Total word count - document B			0
Total word count - documents A + B			19563

8/3/18 (Item 5 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
 (c) 2004 European Patent Office. All rts. reserv.

00674740

Cellular telephone billing management system.
 Abrechnungsverwaltungssystem fur zellulares Telefon.
 Systeme de gestion de taxation pour telephonie cellulaire.

PATENT ASSIGNEE:

AT&T Corp., (589370), 32 Avenue of the Americas, New York, NY 10013-2412,
 (US), (applicant designated states: DE;GB)

INVENTOR:

Grimes, Gary J., 4120 East 115th Place, Thornton, Co. 80233, (US)

LEGAL REPRESENTATIVE:

Buckley, Christopher Simon Thirsk et al (28912), AT&T (UK) LTD., AT&T
 Intellectual Property Division, 5 Mornington Road, Woodford Green,
 Essex IG8 OTU, (GB)

PATENT (CC, No, Kind, Date): EP 647055 A1 950405 (Basic)
 APPLICATION (CC, No, Date): EP 94306935 940921;
 PRIORITY (CC, No, Date): US 130964 931004; US 284708 940801
 DESIGNATED STATES: DE; GB
 INTERNATIONAL PATENT CLASS: H04M-015/28; H04Q-007/22;
 ABSTRACT WORD COUNT: 166

LANGUAGE (Publication,Procedural,Application): English; English; English
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	377
SPEC A	(English)	EPAB95	2395
Total word count - document A			2772
Total word count - document B			0
Total word count - documents A + B			2772

8/3/19 (Item 6 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
 (c) 2004 European Patent Office. All rts. reserv.

00627867

METHOD FOR CARRYING OUT FINANCIAL TRANSACTIONS BY MEANS OF A MOBILE
TELEPHONE SYSTEM
VERFAHREN ZUM DURCHFÜHREN VON FINANZIELLEN TRANSAKTIONEN MITTELS EINES
MOBILEN TELEPHONSYSTEMS
PROCEDE D'EXECUTION DE TRANSACTIONS FINANCIERES AU MOYEN D'UN SYSTEME
TELEPHONIQUE MOBILE

PATENT ASSIGNEE:

TELECOM FINLAND OY, (1803124), Sturenkatu 16, P.O. Box 106, 00511
Helsinki, (FI), (applicant designated states:
AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Vatanen, Harri Tapani, Lepolantie 25 A 3, SF-00660 Helsinki, (FI)

LEGAL REPRESENTATIVE:

Simmelvuo, Markku Kalevi et al (82421), Papula Rein Lahtela Oy, P.O. Box
981, 00101 Helsinki, (FI)

PATENT (CC, No, Kind, Date): EP 669031 A1 950830 (Basic)
EP 669031 B1 971022
WO 9411849 940526

APPLICATION (CC, No, Date): EP 93924638 931111; WO 93FI474 931111

PRIORITY (CC, No, Date): FI 925135 921111; FI 934995 931111

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;
NL; PT; SE

INTERNATIONAL PATENT CLASS: G07F-007/08; H04Q-007/20; H04M-003/42;

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; Finnish

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9710W3	674
CLAIMS B	(German)	9710W3	635
CLAIMS B	(French)	9710W3	791
SPEC B	(English)	9710W3	3886
Total word count - document A			0
Total word count - document B			5986
Total word count - documents A + B			5986

8/3/20 (Item 7 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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00594072

System for authorizing and billing the use of data transmitted by radio
System zur Freigabe und Kostenabrechnung der Nutzung funkübertragener Daten
Systeme d'autorisation et facturation pour l'utilisation d'information
transmise par radio

PATENT ASSIGNEE:

RICOS CO., LTD., (1399800), 1-1-805, Miyakojima, Minamidori 2-chome,
Miyakojima-ku, Osaka, (JP), (applicant designated states:
DE;ES;FR;GB;IT;NL;SE)

INVENTOR:

Tsumura, Mihoji, 1-1-805, Miyakojima Minamidori 2-chome, Miyakojima-ku,
Osaka, (JP)

LEGAL REPRESENTATIVE:

Hering, Hartmut, Dipl.-Ing. et al (5323), Patentanwälte Berendt, Leyh &
Hering Innere Wiener Strasse 20, 81667 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 595354 A1 940504 (Basic)
 EP 595354 B1 990421
 APPLICATION (CC, No, Date): EP 93117605 931029;
 PRIORITY (CC, No, Date): JP 92315938 921030; JP 92322615 921106; JP
 92341671 921127; JP 9320611 930112; JP 9382561 930316; JP 93215290
 930806
 DESIGNATED STATES: DE; ES; FR; GB; IT; NL; SE
 INTERNATIONAL PATENT CLASS: H04N-007/16; H04N-007/173;
 ABSTRACT WORD COUNT: 182

LANGUAGE (Publication,Procedural,Application): English; English; English
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9916	513
CLAIMS B	(German)	9916	483
CLAIMS B	(French)	9916	557
SPEC B	(English)	9916	7795
Total word count - document A			0
Total word count - document B			9348
Total word count - documents A + B			9348

8/3/21 (Item 8 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
 (c) 2004 European Patent Office. All rts. reserv.

00217438

Transaction system
 Überweisungssystem
 Systeme de transactions
 PATENT ASSIGNEE:

VISA INTERNATIONAL SERVICE ASSOCIATION, (560810), 3125 Clearview Way, San
 Mateo California 94402, (US), (applicant designated states:
 AT;BE;CH;DE;FR;GB;IT;LI;NL;SE)

INVENTOR:

Boston, Vincent, 434 Sonora Drive, San Mateo California 94402, (US)
 Asbbo, Einar L., 110 Reed Street, Mill Valley California 94941, (US)
 Boggan, Elvis W., 4586 Tuolumne Way, Concord California 94521, (US)

LEGAL REPRESENTATIVE:

Jackson, David Spence et al (32231), REDDIE & GROSE 16, Theobalds Road,
 London, WC1X 8PL, (GB)

PATENT (CC, No, Kind, Date): EP 200343 A2 861105 (Basic)
 EP 200343 A3 880608
 EP 200343 B1 911127

APPLICATION (CC, No, Date): EP 86302120 860321;
 PRIORITY (CC, No, Date): US 730309 850502
 DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; NL; SE
 INTERNATIONAL PATENT CLASS: G07F-007/08
 ABSTRACT WORD COUNT: 133

LANGUAGE (Publication,Procedural,Application): English; English; English
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB96	691
CLAIMS B	(German)	EPAB96	624
CLAIMS B	(French)	EPAB96	836
SPEC B	(English)	EPAB96	4336

Total word count - document A 0
 Total word count - document B 6487
 Total word count - documents A + B 6487

8/3/22 (Item 9 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
 (c) 2004 European Patent Office. All rts. reserv.

00217412

Transaction card.

Transaktionskarte.

Carte de transaction.

PATENT ASSIGNEE:

VISA INTERNATIONAL SERVICE ASSOCIATION, (560810), 3125 Clearview Way, San Mateo California 94402, (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;NL;SE)

INVENTOR:

Francini, Joseph P., 18574 Greenridge Court, Castro Valley California 94552, (US)

Asbo, Einar L., 110 Reed Street, Mill Valley California 94941, (US)

Boston, Vincent, 434 Sonora Drive, San Mateo California 94402, (US)

LEGAL REPRESENTATIVE:

Jackson, David Spence et al (32231), REDDIE & GROSE 16, Theobalds Road, London, WC1X 8PL, (GB)

PATENT (CC, No, Kind, Date): EP 203683 A2 861203 (Basic)
 EP 203683 A3 880727
 EP 203683 B1 921202

APPLICATION (CC, No, Date): EP 86302094 860321;

PRIORITY (CC, No, Date): US 727869 850426

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: G06K-019/067; G07F-007/10;

ABSTRACT WORD COUNT: 107

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	517
CLAIMS B	(German)	EPBBF1	460
CLAIMS B	(French)	EPBBF1	581
SPEC B	(English)	EPBBF1	3762
Total word count - document A			0
Total word count - document B			5320
Total word count - documents A + B			5320

8/3/23 (Item 10 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
 (c) 2004 European Patent Office. All rts. reserv.

00166374

IC Card and an identification system thereof.

Chipkarte und dazugehöriges Identifikationssystem.

Carte a circuit integre et systeme d'identification pour une telle carte.

PATENT ASSIGNEE:

CASIO COMPUTER COMPANY LIMITED, (249360), 6-1, 2-chome, Nishi-Shinjuku, Shinjuku-ku Tokyo 160, (JP), (applicant designated states:

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	685
CLAIMS B	(German)	EPBBF1	645
CLAIMS B	(French)	EPBBF1	804
SPEC B	(English)	EPBBF1	6456
Total word count - document A			0
Total word count - document B			8590
Total word count - documents A + B			8590

8/3/25 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00344642

SYSTEMS AND METHODS FOR SECURE TRANSACTION MANAGEMENT AND ELECTRONIC RIGHTS PROTECTION

SYSTEMES ET PROCEDES DE GESTION SECURISEE DE TRANSACTIONS ET DE PROTECTION ELECTRONIQUE DES DROITS

Patent Applicant/Assignee:

ELECTRONIC PUBLISHING RESOURCES INC,

Inventor(s):

GINTER Karl L,
SHEAR Victor H,
SPAHN Francis J,
VAN WIE David M,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9627155 A2 **19960906**

Application: WO 96US2303 19960213 (PCT/WO US9602303)

Priority Application: US 95388107 19950213

Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB

GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL

PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AZ BY

KG KZ RU TJ TM AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF

CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 207972

8/3/26 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00343993 **Image available**

FREE-ROAMING REMOTE HAND-HELD POINT-OF-SALE TERMINAL

TERMINAL POINT DE VENTE PORTATIF A DISTANCE A LIBRE ITINERANCE

Patent Applicant/Assignee:

OMEGA DIGITAL DATA INC,
COVELEY Michael,

Inventor(s):

COVELEY Michael,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9626505 A1 **19960829**

Application: WO 96CA104 19960222 (PCT/WO CA9600104)

Priority Application: GB 953662 19950223

Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB
GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL
PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN KE LS MW SD SZ UG AZ
BY KG KZ MD RU TJ TM AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF
BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 9944

8/3/27 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00303276

SYSTEM AND METHOD FOR CONDUCTING CASHLESS TRANSACTIONS

SYSTEME ET PROCEDE PERMETTANT D'EFFECTUER DES TRANSACTIONS SANS ARGENT
LIQUIDE

Patent Applicant/Assignee:

MASTERCARD INTERNATIONAL INC,

Inventor(s):

HOGAN Edward J,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9521427 A1 **19950810**

Application: WO 94US13832 19941201 (PCT/WO US9413832)

Priority Application: US 94191637 19940204

Designated States: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU
JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE
SI SK TJ TT UA UZ VN KE MW SD SZ AT BE CH DE DK ES FR GB GR IE IT LU MC
NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 11554

8/3/28 (Item 4 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00285421 **Image available**

METHOD AND SYSTEM FOR SELECTIVE INCENTIVE POINT-OF-SALE MARKETING IN
RESPONSE TO CUSTOMER SHOPPING HISTORIES

PROCEDE ET SYSTEME DE DISTRIBUTION DE BONS D'ACHAT EN FONCTION DES ACHATS
ANTERIEURS D'UN CLIENT

Patent Applicant/Assignee:

CREDIT VERIFICATION CORPORATION,

Inventor(s):

DEATON David W,

GABRIEL Rodney G,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9503570 A2 **19950202**

Application: WO 94US8221 19940721 (PCT/WO US9408221)

Priority Application: US 9396921 19930723; US 93141471 19931020

Designated States: AU BB BG BR BY CA CN CZ FI GE HU JP KE KG KP KR KZ LK LT
LV MD MG MN MW NO NZ PL RO RU SD SI SK TJ TT UA UZ VN AT BE CH DE DK ES
FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 79153

8/3/29 (Item 5 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00263680 **Image available**
MOBILE TELEPHONE SYSTEMS AND A METHOD FOR CARRYING OUT FINANCIAL
TRANSACTIONS BY MEANS OF A MOBILE TELEPHONE SYSTEM
SYSTEMES TELEPHONIQUES MOBILES ET PROCEDE D'EXECUTION DE TRANSACTIONS
FINANCIERES AU MOYEN D'UN SYSTEME TELEPHONIQUE MOBILE
Patent Applicant/Assignee:
VATANEN Harri Tapani,
Inventor(s):
VATANEN Harri Tapani,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9411849 A1 **19940526**
Application: WO 93FI474 19931111 (PCT/WO FI9300474)
Priority Application: FI 925135 19921111; FI 934995 19931111
Designated States: AT JP LV NO NZ RU US AT BE CH DE DK ES FR GB GR IE IT LU
MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 4032

8/3/30 (Item 6 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00230184
HOME FINANCIAL TRANSACTION SYSTEM
SYSTEME DE TRANSACTION FINANCIERE A DOMICILE
Patent Applicant/Assignee:
U S ORDER,
Inventor(s):
GOROG William F,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9304435 A1 **19930304**
Application: WO 91US9539 19911219 (PCT/WO US9109539)
Priority Application: US 91909 19910814
Designated States: AU BB BR HU JP KR PL RO SU BF BJ CF CG CI CM GA GN ML MR
SN TD TG
Publication Language: English
Fulltext Word Count: 5885

8/3/31 (Item 7 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00220615 **Image available**
INTERACTIVE SEQUENCING METHOD FOR ETC SYSTEMS
METHODE DE MISE EN SEQUENCE INTERACTIVE POUR SYSTEMES ETC
Patent Applicant/Assignee:
FIRST DATA RESOURCES INC,
Inventor(s):
GRATE Robert W,
CAMDEN Wesley S,

HELIGER Patricia M,
CARBULLIDO Kenneth D,
GALVIN Dennis P,
WINKING Bradley K,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9217852 A1 **19921015**
Application: WO 92US2559 19920327 (PCT/WO US9202559)
Priority Application: US 91717 19910329
Designated States: AT AU BE CA CH DE DK ES FR GB GR IT JP KR LU MC NL SE
Publication Language: English
Fulltext Word Count: 14564

8/3/32 (Item 8 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00192022
METHOD AND SYSTEM FOR REMOTE DELIVERY OF RETAIL BANKING SERVICES
PROCEDE ET SYSTEME DE PRESTATION A DISTANCE DE SERVICES BANCAIRES DE DETAIL
Patent Applicant/Assignee:
ONLINE RESOURCES & COMMUNICATIONS CORPORATION,
LAWLOR Matthew P,
CARMODY Timothy E,
Inventor(s):
LAWLOR Matthew P,
CARMODY Timothy E,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9109370 A1 **19910627**
Application: WO 90US7153 19901210 (PCT/WO US9007153)
Priority Application: US 89170 19891208
Designated States: AT AT AU BB BE BF BG BJ BR CA CF CG CH CH CM DE DE DK DK
ES ES FI FR GA GB GB GR HU IT JP KP KR LK LU LU MC MG ML MR MW NL NL NO
RO SD SE SE SN SU TD TG US
Publication Language: English
Fulltext Word Count: 35081

8/3/33 (Item 9 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00189569 **Image available**
CHANGE OF ADDRESS SYSTEM AND METHOD OF USING SAME
SYSTEME DE CHANGEMENT D'ADRESSE ET PROCEDE L'UTILISANT
Patent Applicant/Assignee:
POSTAL BUDDY CORPORATION,
GOODMAN Sidney,
Inventor(s):
GOODMAN Sidney,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9106915 A1 **19910516**
Application: WO 90US6294 19901030 (PCT/WO US9006294)
Priority Application: US 89790 19891030
Designated States: AT AT AU BB BE BF BG BJ BR CA CF CG CH CH CM DE DE DK DK
ES ES FI FR GA GB GB GR HU IT JP KP KR LK LU LU MC MG ML MR MW NL NL NO
RO SD SE SE SN SU TD TG US

Publication Language: English
Fulltext Word Count: 14752

8/3/34 (Item 10 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00189560 **Image available**
FOREIGN CHARACTER TERMINAL AND METHOD OF USING SAME
TERMINAL A CARACTERES ETRANGERS ET SON MODE D'EMPLOI
Patent Applicant/Assignee:
POSTAL BUDDY CORPORATION,
Inventor(s):
GOODMAN Sidney,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9106906 A1 **19910516**
Application: WO 90US6296 19901030 (PCT/WO US9006296)
Priority Application: US 89658 19891030
Designated States: AT AT AU BB BE BF BG BJ BR CA CF CG CH CH CM DE DE DK DK
ES ES FI FR GA GB GB GR HU IT JP KP KR LK LU LU MC MG ML MR MW NL NL NO
RO SD SE SE SN SU TD TG
Publication Language: English
Fulltext Word Count: 5988

8/3/35 (Item 11 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00171888
AUTOMATIC FEE COLLECTING AND RECEIPT DISPENSING SYSTEM
SYSTEME AUTOMATIQUE DE COLLECTE DE TAXES ET DE DISTRIBUTION DE QUITTANCES
Patent Applicant/Assignee:
AMERICAN REGISTRATION SYSTEMS INC,
Inventor(s):
WINN R Keith,
ROUSSEFF Christ M,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9005341 A1 **19900517**
Application: WO 89US4633 19891016 (PCT/WO US8904633)
Priority Application: US 88762 19881101
Designated States: AT AU BE CH DE FR GB IT JP LU NL SE
Publication Language: English
Fulltext Word Count: 8196
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8/7,K/4 (Item 1 from file: 476)
DIALOG(R)File 476:Financial Times Fulltext
(c) 2004 Financial Times Ltd. All rts. reserv.

0005053745 B09IIAKAFFFT
Lloyds Bank places order for 2,000 eftpos terminals
ALAN CANE
Financial Times, P 5
Saturday, September 9, 1989

TEXT:

LLOYDS Bank is buying 2,000 terminals developed for 'cashless shopping' - electronic funds transfer at the point of sale - which it intends to market to retailers.

The order is worth Pounds 1.8m, at Pounds 900 a terminal. Lloyds would not say what its intends to charge retailers for the terminal but confirmed that it intends to make a profit from the deal.

The terminal will sit alongside an electronic cash register or electronic point of sale system, validating plastic cards and recording and processing transactions.

The order has been placed with the UK subsidiary of Nokia Data of Finland, a leading manufacturer of data communications and processing systems. It already supplies most UK clearing banks and EFT/POS UK, the cashless shopping organisation.

The deal between Lloyds and Nokia has broken new ground in two directions. These are that the terminal was developed through co-operation between Lloyds and Nokia as the first phase of a more general collaboration which is expected to yield a range of new EFT/POS products.

The terminal has also been designed to allow the retailer considerable flexibility.

Cashless shopping involves the use of a plastic card as a substitute for cash or cheques using a terminal which reads information on the card.

Details of the **transaction** are **transmitted** from the **terminal** to the **customer's bank** over the telephone.

The Nokia terminal is able to handle all major card schemes, determining which network it has to gain access to and which security system it must use. It can be reprogrammed electronically over the telephone.

EFT/POS UK, owned by the clearers, has been developing standards and procedures for a national cashless shopping system for three years. The first terminals are now going live in trials in Southampton, Leeds and Edinburgh.

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